

Grade 11 - Informational

Improving Memory

Each person has two types of memory—short-term and long-term. Short-term memory is used to store small pieces of information that are needed right away, such as remembering someone's name. Long-term memory is for information that must be recalled later, such as concepts for a school test or family members' birth dates. Long-term memory is also used to store memorable moments of life.

People used to think that brain memory could not be changed, but further research has revealed different information. Just like any other skill, memory can be improved with practice and memory- building exercises.

The following steps will help you improve your memory:

1. **Focus attention.** The ability to pay attention is a major component of memory retention. Research has shown that it takes time to process information into long-term memory.
 - Instead of multitasking, focus on the information present. Remove any auditory diversions that are preventing you from focusing, such as the television or conversations in the vicinity of where you are trying to study. Remove yourself from these distractions by finding a quiet work area.
 - It is also important to avoid visual diversions, such as a cell phone or a computer. Turn off these apparatuses, and give your full attention to the task needed. You will spend less time participating in unnecessary tasks, and you will be able to retain more information.
2. **Avoid procrastination.** Waiting until the last minute to start a project or study for an exam makes comprehending the information difficult. According to a 2001 study, learning materials over a long period of time permits the brain to process and retain the information better.
 - Arrange the materials needed for completing a project or studying for an exam in an orderly manner so the brain is better able to make sense of the information.
 - Select a regular time for studying material, and then study small pieces of information over a long period of time so you are prepared for the project. Research has determined that those who study regularly remember the needed material better than those who wait until the night before.

3. Use a variety of senses. The more senses that are involved when recollecting a memory, the stronger that memory becomes in the brain.

- When you meet someone, you should say the person's name aloud, shake hands, and note the color of the person's eyes. By doing these things, you have used three different senses and are more likely to remember the name.
- It is also important to use a variety of senses when studying. Reading class notes and textbook passages aloud adds auditory learning to the learning process rather than just visual learning. This will aid in recalling information later.

4. Use visual cues. Providing colorful memory references helps retrieve information from your memory.

- Study graphs, photographs, and illustrations while reading texts.
- Draw pictures in the margins of notes as cues for remembering a particular component of the topic that is being studied.
- Use colored highlighters to emphasize the relationship between pieces of information in a text.

5. Develop a process for learning. The order in which new information is processed has an impact on how this information will be remembered. Results show the brain is able to recall materials that were at the beginning or at the end of a learning session better than the materials that were located in the middle of a session.

- While studying, place difficult information either at the beginning or the end of the study session.
- In the middle of the study session, review material that you understand.

6. Practice elaborative rehearsal. Studies have shown that to efficiently place information into the long-term memory and to fully understand the concept, repetition is needed. For example, elaborative rehearsal of a new vocabulary word embodies several steps:

- Read the definition of the new word.
- Study the definition of the new word.

- Read detailed descriptions about what the new vocabulary word means.
After the steps are repeated a number of times, the new information becomes easier to recall.

7. Teach someone else. One of the simplest techniques to improve the understanding and memorization of a concept is to teach it to someone else. In doing so, information is retrieved from the brain and demonstrated to another person.

8. Use mnemonic devices. Clues that help the brain remember information are called mnemonics. They usually associate the information in the memory with a visual image, a sentence, or a word. There are several types of mnemonics that will help in retrieving the information needed. See the chart for more information.

The brain is a complex organ that controls the majority of the body's functions. In addition, it serves as a repository for information and sensations that can be recalled if needed. By utilizing memory techniques, humans can enhance their abilities to retain information.

Mnemonic Device	Description	Example
Acronym	Invent a word where each letter represents something in a list or a grouping.	<i>AMI</i> can be used to help remember the major cultures of Mesoamerica and Latin America. The letter <i>A</i> represents Aztecs, <i>M</i> represents Maya, and <i>I</i> represents Inca.
Acrostic	Create a sentence where the first letter of each word is associated with a memorized piece of information.	"King Philip can only find green socks" is used to help remember the classification system of living things. The sentence is used to help remember kingdom, phylum, class, order, family, genus, and species.
Chunking	Take a large amount of material and split the material into smaller pieces of information.	An example is if you need to remember a long number, such as 1585978432. You would break this number into smaller pieces so you can remember the order, 15 85 97 84 32.
Visual Images	Associate a picture with the information to be recalled.	If you are trying to remember Rosa Parks and what she is known for, visualize a woman sitting on a park bench surrounded by roses waiting for a bus.